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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,473	08/22/2000	Robert Cahn	1999-0414	8446

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EXAMINER

LIN, KENNY S

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/643,473

Applicant(s)

CAHN, ROBERT

Examiner

Kenny Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-8 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callon, US 6,256,295, in view of "Official Notice".
4. As per claims 1 and 5, Callon taught the invention substantially as claimed including a method for monitoring the status of a network, comprising:
  - a. Computing a plurality of measures of network health (col.2, lines 46-60), including unrouted permanent virtual circuits (col.3, lines 1-4, col.5, lines 24-25), permanent virtual circuits whose cost exceeds a prescribed multiple of an optimal route cost (col.3, lines 1-4, 58-67, col.5, lines 11-20), and permanent virtual circuits off an optimal path (col.3, lines 1-4, col.5, lines 3-11) and
  - b. Comparing said measures of network health to a threshold values and selecting a restoration route from a plurality of stored restoration routes (col.4, lines 13-19, col.5, lines 3-20).

5. Specifically, as per claim 5, Callon further taught to comprise a database storing possible restoration routes and to select a restoration route from a plurality of stored restoration routes (col.4, lines 13-19, col.5, lines 3-20). Callon did not specifically teach to measure a sum of unrouted PVCs, a sum of PVCs whose cost exceeds a prescribed multiple of an optimal route cost and a sum of PVCs off an optimal path. Official Notice is taken that it would have been obvious to calculate a sum of each category of the determined PVCs by simply adding each indication. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the calculation of summing the detected unrouted PVCs, PVCs whose cost exceeds a prescribed multiple of an optimal route cost and PVCs that are off an optimal path in Callon's method in order to determine the total number of PVCs of each detection.

6. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callon as applied to claims 1 and 5 above, and further in view of Bentall et al (hereinafter Bentall), US 6,282,170.

7. Bentall was cited in the previous office action.

8. As per claims 2 and 6, Callon taught the invention substantially as claimed in claims 1 and 5. Callon did not specifically teach to restore circuits at a rate parameterized by a value P and observe the behavior of the network; and increase the value P in the network to decrease the time customers experience unrouted traffic. Bentall taught a route restoration method that the

Art Unit: 2154

speed for restoring circuits can be adjusted (col.3, lines 37-41, col.4, lines 29-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Callon and Bentall because Bentall's teaching of adjusting the rate of route restoration help to speed up or slow down the restoration process in Callon's method according to the available capacity (col.2, lines 29-34).

9. Claims 3-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callon as applied to claims 1 and 5 above, and further in view of Srinivasan et al (hereinafter Srinivasan), US 6,304,549.

10. As per claims 3 and 7, Callon taught the invention substantially as claimed in claims 1 and 5. Callon did not specifically teach to monitor said measures to sense when bandwidth needs to be added to the network. Srinivasan taught to monitor said measures to sense when bandwidth needs to be added to the network (col.15, lines 55-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Callon and Srinivasan because Srinivasan's teaching of adjust bandwidth helps Callon's method to increase or decrease bandwidth according to the needs.

11. As per claims 4 and 8, Callon taught the invention substantially as claimed in claims 1 and 5. Callon further taught to compute said plurality of measures of network health to identify unrouted, off optimal and seriously misrouted traffic (col.2, lines 46-60, col.3, lines 1-4, 58-67, col.5, lines 3-20, 24-25).

12. Callon did not specifically teach to derate each edge of the network to have capacity of a predetermined fraction of real capacity; and to determine if the measures are over a specified value and if so, then adding capacity to the network. Srinivasan taught to derate each edge of the network to have capacity of predetermined fraction of real capacity (col.15, lines 43-50, reduce the allocated bandwidth where the allocated bandwidth is the real capacity); and to determine if the measures are over a specified value and if so, then adding capacity to the network (col.15, lines 55-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Callon and Srinivasan because Srinivasan's teaching of adjust bandwidth capacity helps Callon's method to increase or decrease bandwidth according to a value of a predetermined method.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zaumen et al, US 6,658,479.

Kodialam et al, US 6,321,271.

Tsuchiya et al, US 5,115,495.

Weston-Dawkes, US 6,487,177.

Seid, US 5,754,543.

Callon, US 5,699,347.

Spiegel et al, US 5,649,108.

Dravida et al, US 5,253,248..

Cheng, US 6,529,498.

15. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

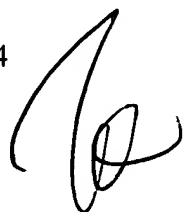
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (703)305-0438. The examiner can normally be reached on 8 AM to 5 PM Tuesday to Friday and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. Additionally, the fax numbers for Group 2100 are as follows:

Official Responses: (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-6121.

ksl  
April 20, 2004



JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100